

REMARKS

The action by the Examiner of this application, together with the cited references, have been given careful consideration. Following such consideration, claims 8 and 9 have been canceled. The remaining claims are unchanged by the present amendment paper. This amendment is presented according to "Revised Amendment Practice" (37 C.F.R. 1.121), effective July 30, 2003. It is respectfully requested the Examiner reconsider the claims in their present form, together with the following comments, and allow the application. It is respectfully requested the Examiner reconsider the claims in their present form, together with the following comments, and allow the application.

The Examiner has objected to claims 8 and 9 under 37 C.F.R. 1.75 as being a substantial duplicate of claim 1. The present amendment cancels claims 8 and 9. Therefore, it is respectfully requested that this objection be withdrawn.

The Examiner has rejected claims 1-9 under 35 U.S.C. 102(b), as being anticipated by Hind (U.S. Patent No. 3,970,283). Furthermore, the Examiner has also rejected claims 1-9 under 35 U.S.C. 103(a), as being obvious in view of the combined teachings of Hind and European Patent Document No. 0149164 ("EP '164").

It is respectfully submitted that neither Hind nor EP '164, taken individually or in combination, teach or suggest the applicant's invention as set forth in the present claims. In this regard, it is respectfully submitted that Hind fails to disclose a refractory device comprising a shock-absorbing interface zone, located between a ceramic support element and a ceramic pouring tube element, made of a material, the thermal properties of which are such that it is substantially solid at ambient temperatures but becomes deformable at elevated temperatures. In this regard, it is respectfully submitted that Hind merely discloses a cement 15 that is of a heat or air setting type (column 2, lines 19-26). This is typically a refractory cement that hardens and becomes brittle. The disclosure, at column 1, lines 53-56, states that this cement is "frangible" (i.e., breakable), rather than "deformable" as required by claim 1. As noted in the specification of the present application (see page 4, line 33 *et seq.* and page 5 lines 1-3), the shock-absorbing interface zone located between the ceramic support element and the ceramic pouring tube element provides continuity of mechanical support to a body portion when in a substantially solid

condition to insure structural integrity of the refractory device, but *deforms* sufficiently to provide a buffer against sudden differential thermal stresses, thereby minimizing the risk of micro-crack fracture through the body portion due to thermo mechanical stresses during pre-heat and at the start of a casting operation.

Further, it may be seen from FIG. 2 that part 14, which is regarded by the Examiner as a ceramic supporting element is not "encapsulated" in a can as required by claim 1. In this regard, the metallic can/sleeve 16, 17 is open at the bottom and does not surround the ceramic pouring tube element at its upper part. The upper part of Hind's ceramic pouring tube 25 is surrounded by a sliding plate 10, which itself is "encapsulated" by a metallic means (flange 18).

It is respectfully submitted that independent claim 1 is patentable over the prior art. Furthermore, the remaining claims depend from independent claim 1, and thus it is respectfully submitted that these claims are patentable over the prior art for at least the reasons set forth above in connection with claim 1.

In view of the foregoing, it is respectfully submitted that the present application is now in proper condition for allowance. If the Examiner believes there are any further matters which need to be discussed in order to expedite the prosecution of the present application, the Examiner is invited to contact the undersigned.

If there are any additional fees necessitated by the foregoing communication, please charge such fees to our Deposit Account No. 50-0537, referencing our Docket No. BE7344PCT(US).

Date: July 14, 2003

Respectfully submitted,



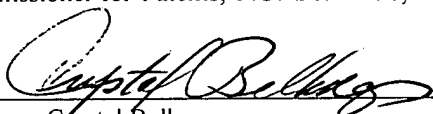
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I hereby certify that this correspondence (along with any paper referenced as being attached or enclosed) is being deposited on the below date with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Mail Stop Non-Fee Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date: July 14, 2003


Name: Crystal Belknap